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Amended claims

1. A method for generating or increasing the resistance to at least one pathogen in plant organisms, which comprises the following process steps
- a) transgenic expression of a protein with sucrose isomerase activity in a plant organism and
 - b) selection of those plant organisms in which, as opposed or as compared to the original plant, the resistance to at least one pathogen exists or is increased.
2. The method according to claim 1, wherein the sucrose isomerase is described by
- i) a protein as shown in SEQ ID NO: 2, 6, 8, 10, 12, 14, 16, 18 or 36, or
 - ii) a functional equivalent to a protein as shown in SEQ ID NO: 2, 6, 8, 10, 12, 14, 16, 18 or 36, or
 - iii) a functionally equivalent fragment to a protein as shown in i) and ii).
3. The method according to claim 1 or 2, wherein the expression of the sucrose isomerase is ensured by a transgenic expression cassette comprising at least one nucleic acid sequence selected from the group consisting of:
- a) nucleic acid sequences encoding an amino acid sequence as shown in SEQ ID NO: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22 or 36, and
 - b) nucleic acid sequences encoding proteins with at least 40% homology with the sequence as shown in SEQ ID NO: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22 or 36, and
 - c) nucleic acid sequences as shown in SEQ ID No: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21 or 35, and
 - d) nucleic acid sequences which is degenerated to a nucleic acid sequence of c), and

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- e) nucleic acid sequences with at least 40% homology with a nucleic acid sequence as shown in SEQ ID No: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21 or 35, and
- 5 f) nucleic acid sequences which hybridize with a complementary strand of the nucleic acid sequence as shown in SEQ ID No: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21 or 35.
4. The method according to any of claims 1 to 3, wherein the sucrose isomerase is expressed under the control of a pathogen-inducible promoter which is functional in plants.
- 10 5. The method according to any of claims 1 to 4, wherein the pathogen is selected from the group consisting of fungi and nematodes.
- 15 6. The method according to any of claims 1 to 5, wherein the pathogen is selected from the group of the fungi consisting of Plasmodiophoromycota, Oomycota, Ascomycota, Chytridiomycetes, Zygomycetes, Basidiomycota and Deuteromycetes.
- 20 7. The method according to any of claims 1 to 6, wherein the plant is selected from the group consisting of potato, beet, sugar beet, tomato, banana, carrot, sugar cane, strawberry, pineapple, paw paw, soybean, oats, barley, wheat, rye, triticale, sorghum and millet, and maize.
- 25 8. A transgenic expression cassette comprising a nucleic acid sequence encode a sucrose isomerase, in functional linkage with a pathogen-inducible promoter which is functional in plants.
- 30 9. The transgenic expression cassette according to claim 8, wherein the sucrose isomerase is defined as claimed in one of claims 2 or 3.
- 35 10. The transgenic expression cassette according to claim 8 or 9, wherein the pathogen-inducible promoter is selected from the group consisting of one of the sequences as shown in SEQ ID NO: 23, 24, 32, 33 or 34.
- 40 11. A transgenic expression vector comprising the transgenic expression cassette according to any of claims 8 to 10.
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12. A transgenic organism comprising the transgenic expression cassette according to any of claims 8 to 10 or a transgenic expression vector as claimed in claim 11.
13. The transgenic organism according to claim 12, selected from the group of the plants consisting of potato, beet, sugar beet, tomato, banana, carrot, sugar cane, strawberry, pineapple, paw paw, soybean, oats, barley, wheat, rye, triticale, sorghum and millet, and maize.
14. A transgenic crop product, propagation material, cells, organs, parts, calli, cell cultures, seeds, tubers, sets or transgenic progeny of the transgenic organism according to one of claims 12 to 13.
15. The use of the transgenic organism according to one of claims 12 to 13, or transgenic crop products, propagation material, cells, organs, parts, calli, cell cultures, seeds, tubers, derived therefrom or transgenic progeny according to claim 14 for the production of palatinose.